

Notice of Allowability

Application No.

09/712,363

Examiner

Teresa E Strzelecka

Applicant(s)

EISENBERG ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed June 30, 2004.
2. ☒ The allowed claim(s) is/are 1-8, 12, 14-17, 22-30 and 34-42.
3. ☒ The drawings filed on 11/13/00 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 06/30/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

JEFFREY FREDMAN
PRIMARY EXAMINER

DETAILED ACTION

1. This office action is in response to an amendment filed June 30, 2004. Claims 1-20, 22-30 and 34-36 were previously pending. Applicants cancelled claims 9-11, 13 and 18-20, amended claims 12, 14 and 34 and added new claims 37-42. Claims 1-8, 12, 14-17, 22-30 and 34-42 are pending and will be examined.
2. Applicants' amendments overcame the following rejections: rejection of claims 1-5, 7-9, 11, 18-20, 34 and 35 under 35 U.S.C. 102(b) as anticipated by Tatusov et al.; rejection of claim 6 under 35 U.S.C. 103(a) over Tatusov et al. and Philipp et al., rejection of claims 10 and 13 under 35 U.S.C. 103(a) over Tatusov et al. and Dandekar et al. and provisional double-patenting rejection of claim 34 over claim 3 of copending application No. 09/493,401.
3. The terminal disclaimers filed by Applicants on June 30, 2004 obviated the obviousness double patenting rejections of claim 34 over claims 1 and 2 of U.S. patent No. 6,466,847, and the obviousness double patenting rejections of claim 34 over claims 1 and 19 of U.S. patent No. 6,564,151.

Terminal Disclaimer

4. The terminal disclaimer filed on June 30, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the U.S. patent No. 6,466,874 has been reviewed and is accepted. The terminal disclaimer has been recorded.
5. The terminal disclaimer filed on June 30, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the U.S. patent No. 6,564,151 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on June 30, 2004 was filed after the mailing date of the non-final rejection on December 30, 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Applicants stated that a certification under CFR 1.97(e) has been provided, however, the statement included did not list a number of a foreign application for which the search report was cited. A telephone call was made to Karen Zachow on September 7, 2004 and Ms. Zachow provided the application No.: JP 2000-596510.

Allowable Subject Matter

7. Claims 1-8, 12, 14-17, 22-30, 34-42 allowed.

8. The following is an examiner's statement of reasons for allowance: Applicants' invention is a method for identifying a second nucleic acid sequence or a second polypeptide sequence by analyzing a functional relationship between the first and second protein sequences using either a "domain fusion" method, a phylogenetic profile method where the homology between proteins is significant if the probability of obtaining a higher score when the sequences are shuffled is below $1/NM$, where N is the number of proteins in the first organism's genome and M is the number of proteins in all other genomes, or a phylogenetic profile method where the phylogenetic profile is determined by calculating evolutionary distances between proteins. The closest prior art reference, Tatusov et al., teach a phylogenetic profile method, but do not teach classifying the proteins based on the total number of sequences analyzed in two genomes or evolutionary distance. Tatusov et al. Do not teach a domain fusion method.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa E Strzelecka whose telephone number is (571) 272-0789. The examiner can normally be reached on M-F (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TS

September 13, 2004


JEFFREY FREDMAN
PRIMARY EXAMINER

9/14/04